

APPENDIX D
Serial No.: 09/640,838
Claims as Presently Pending

4. (Reiterated) The conjugate of Claim 15, wherein the chemotherapeutic agent is an antibiotic.

5. (Reiterated) The conjugate of Claim 15, wherein the chemotherapeutic agent is an antimetabolite.

15. (Reiterated) A conjugate useful for treating a disease selected from the group consisting of tumoral, infectious, and autoimmune disease in a subject comprising:

an active substance useful for treating said disease selected from the group

consisting of a chemotherapeutic agent and a photoactive compound;

a native human serum albumin that is not regarded as exogenous by the subject; and

a linker linking said active substance to said albumin, wherein said linker can be cleaved intracellularly, and wherein said linker comprises an azo group.

17. (Reiterated) The conjugate of Claim 15, wherein several active substances useful for treating said disease are linked to said albumin through one or more linkers.

18. (Reiterated) The conjugate of Claim 15, wherein the linker has the following structure:



wherein:

R is an aromatic compound, and

Y is selected from the group consisting of C(O), S(O)₂, P(O)OH and As(O)OH.

20. (Reiterated) The conjugate of Claim 15, wherein the conjugate comprises 4-aminophenylsulphonic acid or 4-aminophenylphosphonic acid and albumin.

21. (Reiterated) The conjugate of Claim 15, wherein the conjugate comprises cytidine.

22. (Reiterated) The conjugate according to Claim 15, wherein the conjugate comprises tetracycline.

23. (Reiterated) A process for the preparation of the conjugate of Claim 15, comprising binding an active substance selected from the group consisting of a chemotherapeutic agent and a photoactive compound useful for treating a disease selected from the group consisting of tumoral, infectious, and autoimmune disease to a native human serum albumin that is not regarded as exogenous by the subject, by means of a linker containing an azo group.

24. (Reiterated) A method of treating a disease selected from the group consisting of tumoral, infectious, and autoimmune disease, comprising administering the conjugate of Claim 15 in an amount effective to ameliorate the symptoms of said disease.

25. (Reiterated) The conjugate of Claim 15, wherein several active substances are present.

26. (Reiterated) The conjugate of Claim 15, wherein the linker has the following structure:



wherein:

R is an aromatic compound, and

Y is a group selected from the group consisting of C(O), S(O)₂, P(O)OH and As(O)OH.

27. (Reiterated) The conjugate according to Claim 17, wherein the linker has the following structure:



wherein:

R is an aromatic compound, and

Y is a group selected from the group consisting of C(O), S(O)₂, P(O)OH and As(O)OH.

30. (Reiterated) The process of Claim 23, wherein said binding comprises the formation of an ester.

31. (Reiterated) The conjugate of Claim 4, wherein the antibiotic comprises a tetracycline.

32. (Reiterated) The conjugate of Claim 5, wherein the antimetabolite comprises a methotrexate.

33. (Reiterated) The conjugate of Claim 5, wherein the antimetabolite comprises a sulfonamide.

34. (Reiterated) The conjugate of Claim 5, wherein the antimetabolite comprises a nucleoside that inhibits the replication or transcription of a nucleic acid into which it is incorporated.

35. (Reiterated) The conjugate of Claim 15, wherein the active substance comprises an acid group.

36. (Reiterated) The conjugate of Claim 35, wherein the acid group is selected from the group consisting of $\text{-CO}_2\text{H}$, $\text{-SO}_3\text{H}$, $\text{-PO}_3\text{H}_2$, and $\text{-AsO}_3\text{H}_2$.

37. (Reiterated) The conjugate of Claim 15, wherein the active substance is selected from the group consisting of 4-aminobenzoic acid, 2-aminobenzoic acid, 4-aminophenylsulphonic acid, 2-aminophenylsulphonic acid, 4-aminophenylphosphonic acid, 2-aminophenylphosphonic acid, 4-aminophenylarsonic acid, and 2-aminophenylarsonic acid.

38. (Reiterated) The conjugate of Claim 15, wherein the active substance is selected from the group consisting of a deoxyuridine, a deoxycytidine, a cytosine arabinoside, a 5-fluorouracil, a 5-fluorodeoxyuridine, and an azidothymidine.

39. (Reiterated) The conjugate of Claim 15, wherein the photoactive compound comprises a porphyrine.

40. (Reiterated) The conjugate of Claim 15, wherein the photoactive compound is selected from the group consisting of a chlorine and a bacteriochlorine.

42. (Reiterated) The conjugate of Claim 18, 26 or 27, wherein the aromatic group comprises a phenylene.

43. (Reiterated) The conjugate of Claim 18, 26 or 27, wherein the aromatic group comprises a derivative of phenylene.